

UNITED STATES CLIMATE ALLIANCE

Grid Modernization Factsheet

An Initiative of the U.S. Climate Alliance

Background

Between now and 2030, the United States is expected to invest \$600 billion in electricity transmission and distribution and reinvest an additional \$500 billion in the power generation fleet. Those investments, which would include as much as 480 gigawatts of fossil fuel replacement and new capacity across the United States, threaten to “lock-in” enormous greenhouse gas emissions over the life of the projects - incompatible with achieving the goals of the Paris Agreement. However, in recent years new technology solutions including energy storage, distributed solar, energy efficiency, and sophisticated energy management approaches have become more economic. These environmentally-friendly solutions are now able to be deployed independently or on a portfolio basis to defer or forgo the need for many traditional generation, transmission and distribution investments.

State Leadership to Date

Many US Climate Alliance states have pioneered innovative approaches to grid modernization, including utility regulatory and business model reform to enable “non-wires alternatives.” Non-wires alternatives refer to using advanced distributed energy technology to offset the need for traditional utility capital investments. Examples include:

- Washington State has implemented non-wires alternatives at the transmission level, electing not to construct a proposed 80-mile, 500-kV transmission line, and will instead use non-wire alternatives like grid management and energy storage.
- New York State has 36 non-wires alternatives projects in various stages of development, including a project in Brooklyn and Queens which will drive as much as \$1 billion in savings to ratepayers.
- In California, the state Public Utilities Commission has worked with utilities to launch non-wires alternatives as opposed to approving ratepayer funds for traditional transmission and distribution upgrades.

U.S. Climate Alliance Collaboration

In September 2017, the U.S. Climate Alliance established a Power Sector Working Group to develop new tools and resources that benefit the electric grid and help meet renewable energy and emission reduction goals. U.S. Climate Alliance States are actively collaborating on grid modernization strategies, including non-wires alternatives, and will work together to synthesize lessons learned from non-wires procurement approaches around the United States.

U.S. Climate Alliance States are further collaborating to create an implementation “playbook” to help regulators and utilities implement non-wires approaches and best practices. States are working with the Rocky Mountain Institute to develop the non-wires alternatives playbook and support broad dissemination and implementation of the findings and resources.

The [[HYPERLINK "https://www.usclimatealliance.org/"](https://www.usclimatealliance.org/)] is a bipartisan coalition of governors committed to reducing greenhouse gas emissions consistent with the goals of the Paris Agreement.